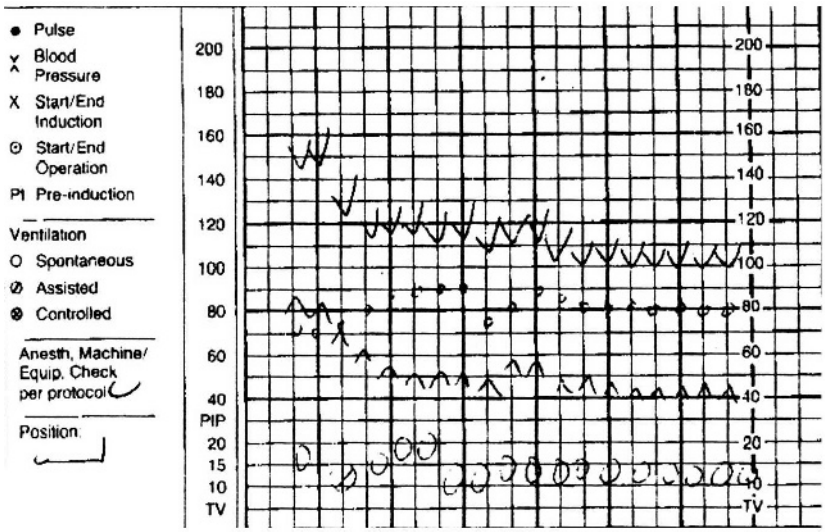

Figure 2 Intraoperative anaesthesia record showing 80 minute drop in mean arterial pressure. Small boxes, 10 minutes; Large boxes, 30 minutes; downward pointing arrowheads, systolic pressure; upward pointing arrowheads, diastotic pressure.

congenitally anomalous, the left pale and swollen. Visual fields revealed an inferior arcuate defect in the left eye.

Comment

Many types of non-ophthalmic surgery have been associated with anterior ischaemic optic neuropathy (AION).[1] Our patient's preoperative risk factors included treated hyperlipidaemia and anomalous nerves. During surgery he did not have any of the established risk factors for perioperative non-AION with the exception of prolonged hypotension. His MAP was reduced by 41.6% for 80 minutes. The previous surgery on the patient's left side decreased the MAP only 28%.

It is likely that this hypotension combined with anomalous nerves led to his optic nerve infarction. The perfusion pressure of the eye drops linearly with the mean arterial blood pressure.[3] If there are areas of atherosclerosis or watershed zones present in a particular optic nerve a significant drop in the perfusion pressure to the eye could result in ischaemia. Of interest, he experienced transient visual obscurations after his first surgery with a smaller drop in his MAP, perhaps signifying a vascular system susceptible to hypotensive episodes.

Bhatti and Enneking described decreased vision and ophthalmoparesis following rotator cuff surgery but the patient did not have non-AION and the vision eventually recovered.[4] In addition, after a review of Medline, we did not find any other cases of perioperative visual loss in whichh the only risk factor was prolonged hypotension. This underscores the importance of hypotension as an independent risk factor for perioperative visual loss.

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Bilateral intraocular involvement in Lemierre's syndrome

First described in 1936, Lemierre's syndrome is an oropharyngeal infection characterised by septic thrombophlebitis of head and neck veins, complicated by dissemination of septic emboli to pulmonary and systemic sites.[1] Ophthalmic involvement in this syndrome is extremely uncommon, having been reported previously in a patient with retro-orbital involvement and proptosis,[2] and more recently as a case of endogenous endophthalmitis.[3] Here, we describe a case of bilateral intraocular involvement in this interesting and rare disease.

Case report

A previously healthy 14 year old African American female presented to the emergency department with cough, dyspnoea and tachypnoea, and a pulse oximeter reading of 70% on room air. A chest *x* ray demonstrated diffuse bilateral pulmonary infiltrates and a right sided pleural effusion. Empirical treatment with intravenous vancomycin 1 g intravenously every 12 hours and cefotaxime 1 g intravenously every 8 hours was initiated. She was transferred to the intensive care unit for treatment and further examination. Her laboratory studies were remarkable for a rapid decline in her haemoglobin from 12.6 g/dl to 8.6 g/dl and a drop in platelet count from 57 000×10^9/l to 35 000×10^9/l.

Computed tomography (CT) of the neck revealed a left parapharyngeal abscess adjacent to a clot in the left internal jugular vein (fig 1). Multiple other lesions, thought to be septic emboli, were found systemically, including in her liver, spleen, and lungs. Subsequent blood cultures were positive for *Fusobacterium necrophorum*. Her antibiotic regimen was changed to clindamycin 300 mg intravenously every 6 hours.

Initial ophthalmic examination was significant for visual acuity of light perception in the right eye and 20/150 in the left with normal pupillary responses, intraocular pressure, and anterior segments. Indirect ophthalmoscopy revealed a dense vitreous haemorrhage in the right eye, precluding any view of the retina, and a preretinal haemorrhage in the left eye centred over the macula. B-scan ultrasonography of the right eye demonstrated vitreous haemorrhage and a subretinal mass with moderate internal reflectivity (fig 2). Three weeks after her initial presentation, her platelet count normalised and blood cultures were negative, but the dense vitreous haemorrhage is the right eye persisted with light perception vision. Subsequently, a pars plana vitrectomy was performed on the right eye, from which Gram stains and cultures were negative. Intraoperatively, the subretinal mass

Figure 1 Computed tomography (CT) scan with intravenous contrast of the neck at the level of the hyoid bone. Note the patency of the carotid arteries bilaterally (black arrowheads). On the right, the internal jugular vein is patent (white arrow), whereas on the left the internal jugular vein is thrombosed (black arrow).

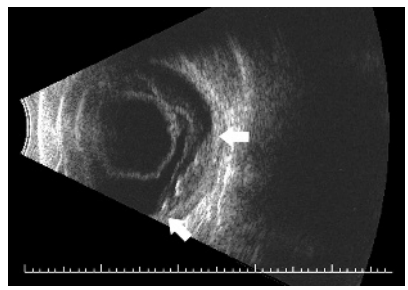

Figure 2 B-scan ultrasound of the right eye demonstrates a subretinal mass of moderate internal reflectivity (white arrows) accompanied by vitreous haemorrhage.

appeared to be an organised abscess with breakthrough vitreous haemorrhage.

At the 2 month visit, her vision improved to 20/80 in the right eye and 20/25 in the left eye.

Comment

Lemierre's syndrome is a rare and potentially fatal medical emergency characterised by an anaerobic oropharyngeal infection leading to septic thrombophlebitis of the internal jugular vein, often complicated by distant metastatic infections. The majority of reported cases have occurred in previously healthy young adults, and *Fusobacterium necrophorum* is the usual aetiological agent. In the post-antibiotic era, the clinical signs are typically pharyngitis, a tender and swollen neck, and non-cavitating pulmonary infiltrates.[4]

Ophthalmic complications of Lemierre's syndrome have rarely been reported in the literature and include proptosis and endophthalmitis. Bilateral intraocular involvement is exceedingly uncommon.

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MAILBOX

Identifying Troxler

I should like to congratulate the authors for the article citing the original publication on peripheral fading by Troxler (1804).[1] However, as editor of the website on the work of the Swiss philosopher Ignaz Paul Vital Troxler (1780–1866), who started as physician and ophthalmologist before engaging in research on anthropological and political subjects, I regret that after 201 years, the publication of 1804 is often cited in an incomplete and/or misleading way.

Troxler used to sign his publications in the world's first ophthalmological journal (*Ophthalmologische Bibliothek*, edited by K Himly and JA Schmidt) with ''D'' for ''doctor.'' Therefore, the fact that the early neurophysiologist and neuropsychologist ''D Troxler'' and the political philosopher I P V Troxler are identical has often been overlooked in the medical literature, despite the fact that Troxler's concept of perception has had an important impact on the development of modern neuropsychological research.

I should like to suggest that, in references to ''Über das Verschwinden gegebener Gegenstände innerhalb unseres Gesichtskreises'' (On the disappearance of given objects from our visual field), the author be cited as ''Troxler D (IPV)'', to facilitate identification.

I kindly invite you to visit the website (www.troxlerforum.ch), which contains a biographical summary, a bibliography, and some references on research related to Troxler's works on visual perception.

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Intraocular pressure changes in the contralateral eye after trabeculectomy with mitomycin C

We read with great interest the article by Vysniauskiene *et al*.[1] Their efforts in evaluating the intraocular pressure (IOP) changes of the contralateral eyes after trabeculectomy with mitomycin C (MMC) is appreciated. They concluded that a month after trabeculectomy, the mean IOP in contralateral eyes decreased. Of note, among the 24 fellow eyes in the study, 11 (45.8%) had topical ocular hypotensive therapy. Among the remaining 13 (54.2%) who had not, 12 of them had undergone trabeculectomy with MMC. We would be grateful if the authors would share with us their opinions as to whether the presumed ''ophthalmotonic consensual reaction'' may be modified in an unknown way by the topical medications or surgery, thereby affecting the interpretation of their results.[2]

The decision by an ophthalmologist to offer trabeculectomy is likely to be made at a point when the IOP is high on the variation curve. Therefore, the decreased IOP in the fellow eye could be the result of the ''regression to the mean'' effect. The IOP of the fellow eye was measured 1 day before surgery, as well as 1 day and 1 month after surgery. As the study was conducted between 1995 and 2000, we would be interested to know the long term IOP changes after surgery. We suggest that this may help to lessen the effect of regression to the mean, as well as to see how long will the ''ophthalmotonic consensual reaction'' persist beyond 1 month.

As the IOP in glaucoma patients is unlikely to follow a normal Gaussian distribution, and it appeared that the data set was not yet tested for normality, the use of non-parametric counterparts such as Wilcoxon signed rank test is probably more appropriate.

We would like to commend the authors for conducting the study on this interesting topic. We wish that the issues raised will help broaden the discussion.

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Short and long term effect of combined cataract and glaucoma surgery with MMC on ocular dimensions

Law and co-authors have contributed valuable data on the effect of combined cataract surgery and trabeculectomy with mitomycin C (MMC) on ocular dimensions.[1] But it is unclear from the report whether all patients' data were collected at the same interval postoperatively and when the postoperative data were collected. As we know, the change in intraocular pressure, axial length (AL), and corneal curvature after surgery could be different at varied follow up period.

In a study by Claridge and co-authors, the induced with the rule astigmatism after trabeculectomy was 2.63 dioptres (D) at 1 month and decreased to 1.24 D by 3 months.[2] Additionally, intraoperative application of MMC in trabeculectomy may affect the wound healing process by inhibition of fibroblast proliferation, and therefore it has long lasting effects on AL and corneal curvature. As reported previously by Kook and co-authors,[3] the mean AL was significantly less postoperatively and changed throughout the 12 month follow up (-0.54 mm at 1 week, -1.15 mm at 1 month, and -0.9 mm at 12 months). The overall mean induced astigmatism was maximal at 3 months postoperatively ($+1.23$ D$\times 90°$) and gradually decreased to $+0.65$ D$\times 90°$ at 12 months.

On the other hand, the use of topical steroid or non-steroid anti-inflammatory agents could affect on wound healing, and has been reported to have significant effects on ocular dimensions after operation.[4] It would also be necessary to clarify on this issue with more information on postoperative medications. A further prospective study with a long term follow up period is warranted to help ascertain whether the change in ocular dimensions after combined cataract and glaucoma surgery with MMC is a temporary or long term effect.

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